

What is claimed is:

1. A method for driving a plasma display panel in which a plurality of display electrodes constitutes an electrode pair for a surface discharge of each row and is arranged so that one electrode is shared by two neighboring rows for display, and a plurality of address electrode is arranged so as to cross the electrode pair in each column, the method comprising the steps of:
 - 10 performing addressing by controlling a potential of the address electrode in accordance with display data in parallel with row selection for biasing one display electrode of the electrode pair corresponding to a selected row to a selecting potential temporarily;
 - 15 making a cell-selecting voltage applied to interelectrode AY between the display electrode and the address electrode for the addressing lower than a discharge starting voltage of the interelectrode AY; and
- 20 applying a row selection voltage that is lower than a discharge starting voltage of interelectrode XY between the display electrodes of the electrode pair corresponding to the selected row to interelectrode XY so as to generate an address discharge.
- 25 2. The method according to claim 1, further comprising the steps of biasing one display electrode of each electrode pair to the selecting potential for the row selection period of two rows, biasing the other display electrode to the potential for applying the row selection voltage for the row selection period of two rows, and overlapping the bias period of one display electrode with the bias period of the other display electrode for

the row selection period of one row.

3. The method according to claim 1, wherein the display electrode that is biased to the selecting potential for the row selection is biased so as to make the voltage of the
5 interelectrode XY in a non-selecting period.

4. The method according to claim 1, further comprising the steps of:

10 classifying the plural display electrodes into two groups in accordance with whether an arrangement order of the display electrode is odd or even;

making the display electrodes belonging to one group to be scan electrodes that can be controlled independently;

15 making the display electrodes belonging to the other group to be common electrodes that do not need independent control;

classifying the common electrodes into a first group and a second group in accordance with whether the arrangement order counted by noting only the common electrodes is odd or even;

20 dividing an address period for performing the addressing into a first half and a second half;

performing row selection in the first half in which the common electrodes of the first group are biased as a whole and all scan electrodes are biased one by one; and

25 performing row selection in the second half in which the common electrodes of the second group are biased as a whole and all scan electrodes are biased one by one.

30 5. The method according to claim 4, further comprising the step of setting different values of at least one of the cell-selecting voltage applied to the interelectrode AY and the row selection voltage applied to the interelectrode XY between the

first half and the second half.

6. A display apparatus comprising:

a plasma display panel in which a plurality of display electrodes constitutes an electrode pair for a surface discharge of each row and is arranged so that one electrode is shared by two neighboring rows for display, and a plurality of address electrode is arranged so as to cross the electrode pair in each column; and

10 an electric circuit for controlling the plasma display panel in accordance with the driving method of claim 1.

7. The display apparatus according to claim 6, wherein the plasma display panel includes a partition having a grid shape in a plan view for dividing the discharge space for each cell.

15 8. A method for driving a plasma display panel in which a plurality of display electrodes constitutes an electrode pair for a surface discharge of each row and is arranged so that one electrode is shared by two neighboring rows for display, and a plurality of address electrode is arranged so as to cross the electrode pair in each column, and a partition having a grid shape in a plan view for dividing the discharge space for each cell is provided, the method comprising the steps of:

25 classifying the plural display electrodes into two groups in accordance with whether an arrangement order of the display electrode is odd or even;

making the display electrodes belonging to one group scan electrodes that can be controlled independently;

30 classifying the display electrodes belonging to the other group into a first group and a second group in accordance with whether the arrangement order counted by noting only the

electrodes belonging to the other group is odd or even;

dividing an address period into a first half and a second half, the address period being for performing the addressing by controlling a potential of the address electrode in accordance

5 with display data in parallel with row selection for biasing one display electrode of the electrode pair corresponding to a selected row to a selecting potential temporarily; and

providing a preparation period for equalizing charge adjacent to the first half and adjacent to the second half.

10 9. The method according to claim 8, further comprising the step of:

performing row selection in the first half in which the display electrodes of the first group are biased as a whole and all scan electrodes are biased one by one; performing row 15 selection in the second half in which the display electrodes of the second group are biased as a whole and all scan electrodes are biased one by one;

making a cell-selecting voltage applied to interelectrode AY between the display electrode and the address electrode for 20 the addressing lower than a discharge starting voltage of the interelectrode AY; and

25 applying a row selection voltage that is lower than a discharge starting voltage of interelectrode XY to the interelectrode XY between the display electrodes of the electrode pair corresponding to the selected row so as to generate an address discharge.

10. A method for driving a plasma display panel in which a plurality of first display electrodes and a plurality of second display electrodes are arranged so as to constitute 30 electrode pairs for surface discharges independently in rows,

and a plurality of address electrode is arranged so as to cross the electrode pair in each column, the method comprising:

classifying the plural first display electrodes into a first group and a second group in accordance with whether an 5 arrangement order counted by noting only the first display electrodes is odd or even;

dividing the plural second display electrodes into groups by two rows so as to make common electrically for each group;

dividing an address period into a first half and a second 10 half when performing the addressing by controlling a potential of the address electrode in accordance with display data in parallel with row selection for biasing a second display electrode of the electrode pair corresponding to a selected row to a selecting potential temporarily;

15 performing row selection in the first half in which the first display electrodes of the first group are biased as a whole and all scan electrodes are biased one by one;

20 performing row selection in the second half in which the common electrodes of the second group are biased as a whole and all scan electrodes are biased one by one;

making a cell-selecting voltage applied to interelectrode AY between the second display electrode and the address electrode for the row selection lower than a discharge starting voltage of the interelectrode AY; and

25 applying a row selection voltage that is lower than a discharge starting voltage of interelectrode XY between the display electrodes of the electrode pair corresponding to the selected row to the interelectrode XY so as to generate an address discharge.

30 11. A method for driving a plasma display panel in

which a plurality of display electrodes constitutes an electrode pair for a surface discharge of each row and is arranged so that one electrode is shared by two neighboring rows for display, and a plurality of address electrode is arranged so as to cross the 5 electrode pair in each column, and a partition having a grid shape in a plan view for dividing the discharge space for each cell is provided, the method comprising the steps of:

10 performing addressing of erasing format by reducing wall charge of the cell to be off display after a process of forming wall charge in all cells;

classifying the plural display electrodes into two groups in accordance with whether an arrangement order of the display electrode is odd or even;

15 making the display electrodes belonging to one group to be scan electrodes that can be controlled independently;

making the display electrodes belonging to the other group to be common electrodes that do not need independent control;

20 classifying the common electrodes into a first group and a second group in accordance with whether the arrangement order counted by noting only the common electrodes is odd or even;

dividing an address period for performing the addressing into a first half and a second half;

25 performing row selection in the first half in which the common electrodes of the first group are biased as a whole and all scan electrodes are biased one by one after inverting a polarity of wall charge of a row selected in the second half; and

30 performing row selection in the second half in which the common electrodes of the second group are biased as a whole and all scan electrodes are biased one by one after inverting a

polarity of wall charge of a row selected in the first half.

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